# **REMARKS**

Upon entry of this paper, claims 1-17, 19-34, 36-51, 53-70 and 72-92 are presently pending in this application. Claims 1, 5, 19, 22, 36, 53, and 72-76 have been amended herein. No claims have been added or canceled by way of this response. Claims 18, 35, 52, 71 and 93 have been previously canceled. No new matter has been added. Applicant submits that all of the pending claims are patentable and in condition for allowance.

### Claim Rejections

Claims 1, 19, 36, 53 and 72-76 are rejected under 35 U.S.C. § 112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (Office Action, p.3, § 5).

Claims 5, 22 and 36 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention (Office Action, p.4, § 9).

Claims 76-92 are rejected under 35 U.S.C. § 101 as being directed to non-statutory matter (Office Action, p.5, § 11).

Claims 1, 5-8, 14-17, 36, 40-42, 48-51, 53, 57-60, 66-70, 72, 74-76, 79-83 and 89-92 are rejected under 35 U.S.C. § 102(a) and 102(e) as being anticipated by Eryilmaz et al, (United States Patent Publication Number 2003/0122826, hereafter "Eryilmaz") (Office Action, p.6, § 13).

Claims 2-4, 19-25, 31-34, 37-39, 54-56, 73 and 77-78 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson et al (United States Patent Number 6, 088,029), (hereafter "Guiberson") (Office Action, p.15, § 16).

Claims 9, 43, 61 and 84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in view of Chen et al(United States Patent Number 5, 684,945),

(hereafter "Chen") in further view of Mikurak (United States Patent Number 7,130,807), (hereafter "Mikurak") (Office Action, p.22, § 17).

Claims 10, 44, 62 and 85 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Herbrich et al (United States Patent Number 5, 684,945), (hereafter "Herbrich") (Office Action, p.24, § 18).

Claims 11, 45, 63 and 86 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Chen (Office Action, p.26, § 19).

Claims 12, 46, 64 and 87 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Coburn et al (United States Patent Application Publication Number 2004/0128120), (hereafter "Coburn") (Office Action, p.27, § 20).

Claims 13, 47, 65 and 88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Mikurak (Office Action, p.28, § 21).

Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Chen in still further view of Mikurak (Office Action, p.31, § 22).

Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Herbrich (Office Action, p.31, § 23).

Claim 28 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Chen (Office Action, p.32, § 24).

Claim 29 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Coburn (Office Action, p.32, § 25).

Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Mikurak (Office Action, p.33, § 26).

# 35 U.S.C. § 112, First Paragraph Rejections

The Examiner objected to the Applicant's use of the term "control system" in independent claims 1, 19, 36, 53, and 72-76. While not agreeing with the Examiner's statement that the term "control system" is not adequately described in the specification and therefore causes claim indefiniteness in light of the accepted definition of the term, Applicant has amended the independent claims to more specifically recite a "controller system including at least one controller and two or more data modules." Accordingly, Applicant requests the reconsideration of the pending rejections and the allowance of claims 1, 19, 36, 53, and 72-76.

#### 35 U.S.C. § 112, Second Paragraph Rejections

Claims 5, 22 and 36 have been amended to correct the antecedent basis issues noted by the Examiner. Accordingly, Applicant submits that claims 5, 22 and 36 are in condition for allowance.

### 35 U.S.C. § 101 Rejections

The Examiner objected to the Applicant's use of the term "medium." Applicant has amended independent claim 76 herein to recite a "computer-readable" medium. Accordingly, Applicant submits that claim 76, and claims 77-92 which are dependent thereon, are in condition for allowance.

#### 35 U.S.C. § 102 Rejections

All of the pending 35 U.S.C. § 102 and 103 rejections rely on Eryilmaz. Applicant respectfully traverses the rejections.

Eryilmaz discusses the use of an adaptive lookup table block in a block diagram simulation environment. A lookup table is a table in computer memory that is used to store numeric data representing a physical system or plant. In a simulation environment, a lookup table provides a means to capture the behavior of a physical system being modeled (see

paragraphs [0003-0004]. Eryilmaz discusses using the input and output measurements of simulated plant behavior that are received by an adaptive lookup block in a simulation environment to create and update an underlying lookup table (see paragraph [0025]). The use of the adaptive lookup table block enables the lookup table to take into account the time-varying nature of system behavior and to account for additional data being generated over time by a model simulating the system (see paragraph [0008]).

Independent claims 1, 19, 36, 53, 72-76 all recite similar claim elements. Accordingly, claim 1 will be treated as a representative claim 1 as arguments made with respect to claim 1 apply to independent claims 19, 36, 53, and 72-76. Representative claim 1 as amended recites:

"In a simulation environment, a method for controlling collection of data generated by a dynamic system model, comprising:

providing the dynamic system model;

providing a controller system separate from the dynamic system model, the controller system including at least one controller and two or more data modules, the two or more data modules being communicatively coupled to collect data from the dynamic system model;

activating the dynamic system model, thereby generating data; and synchronizing data collection from the dynamic system model by the two or more data modules using the at least one controller."[emphasis added]

The independent claims have been amended to claim a controller system that includes at least one controller and two or more data modules. The controller(s) is(are) used to synchronize the collection of data from the dynamic system model by the two or more data modules. These claim elements are lacking from Eryilmaz.

The claimed controller controls data collection and displays parameters for each of the two or more data modules in a manner that enables synchronization (see page 13, Applicant's specification, lines 20-22). With the controller, the user is able to control, manipulate, view, review, and synchronize the collection of data in a dynamic system. The synchronized data modules can execute multiple functions including suspending data collection and taking a

momentary snapshot of collected data while the data collection continues (see page 13, Applicant's specification, lines 24-33, and page 14, lines 1-2). Exemplary uses include the synchronization of a pausing of multiple strip-chart type instruments and subsequent coordinated data review (see page 14, Applicant's specification, lines 31-33)

Eryilmaz is completely silent regarding, and does not disclose or suggest, "a controller system including at least one controller and two or more data modules." Furthermore Eryilmaz does not disclose or suggest the use of a controller to synchronize data collection from the dynamic system model by the two or more data modules. The Examiner cited Fig. 1, Items 22, 28 and 40, page 1, para 0005, lines 1-3, para. 0012) as disclosing the previous version of the synchronization claim element (see Office Action Page 6, last paragraph). The section cited by the Examiner is discussing the use of the adaptive lookup table block to update an associated adaptive lookup table so that it contains current data, it does not discuss **the synchronization of the collection of data**. Furthermore, there is no discussion of synchronizing the collection of data using a controller and multiple data modules. Additionally, in Eryilmaz, the collected data is acquired from a **physical** (real-world) plant and sent to the modeling environment rather than being acquired **from** the dynamic system model as required by Applicant's claim (see Fig. 1, Eryilmaz, output 16 and note direction of arrows). Accordingly, as Eryilmaz fails to dislose all of the elements of independent claim 1, Applicant respectfully submits that claim 1 is in condition for allowance.

Applicant also submits that independent claims 36, 72 and 74-76 are also in condition for allowance for at least the same reasons as given for claim 1. Claims 36, 72 and 74-76 also claim a controller system with at least one controller and two or more data modules and the use of the controller to synchronize the collection of data from a system model. Furthermore, independent claim 53 which recites the synchronization of data collection from a dynamic system rather than a dynamic system model, claims a controller system with at least one controller and two or more data modules and is therefore allowable for the reasons discussed with regard to those claim elements in claim 1 above.

Claims 5-8 and 14-17 depend upon claim 1 and are therefore allowable for the same reasons as set forth above for claim 1. Similarly, claims 40-42 and 48-51 which depend upon

claim 36, claims 57-60 and 66-70 which depend upon claim 53, and claims 79-83 and 89-92 which depend upon claim 76, are also allowable as not all of the elements of the respective base claims are disclosed.

# 35 U.S.C. § 103 Rejections

Independent claims 19 and 73 and dependent claims 2-4, 9-13, 20-34, 37-39, 43-47, 54-56, 61-65, 77-78 and 84-88 were rejected under 35 U.S.C. § 103 as set forth above.

Independent claims 19 and 73 were rejected as obvious over Eryilmaz in view of Guiberson (Guiberson was cited as disclosing a snapshot function). Claim 19 recites in part:

"providing a controller system separate from the dynamic system model, the controller system including at least one controller and two or more data modules, the two or more data modules being communicatively coupled to collect data from the dynamic system model;

activating the dynamic system model, thereby generating data;

synchronizing data collection from the dynamic system model by the two or more data modules using the at least one controller; "[emphasis added].

As presented above in the discussion of the 102(b) rejection of claim 1, Eryilmaz does not disclose either the controller system or the synchronization of the collection of data using the controller as discussed above. Therefore, Eryilmaz does not disclose these features as recited in claim 19. Guilberson was cited by the Examiner solely as disclosing the snapshot function claim element in claim 19 which the Examiner admitted was not found in Eryilmaz. However, Guilberson does not disclose or suggest the other elements discussed above that are missing from Eryilmaz. Accordingly, as the combination of Eryilmaz in view of Guilberson fails to disclose or suggest all of the elements of claim 19, Applicant requests the allowance of claim 19.

Independent claim 73 is a corresponding system claim and is allowable for the same reasons as claim 19.

Applicant notes that all of the remaining 35 U.S.C. § 103 rejections for dependent claims 2-4, 9-13, 20-34, 37-39, 43-47, 54-56, 61-65, 77-78 and 84-88 erroneously rely on Eryilmaz which, as set forth above, fails to disclose or suggest the elements of the underlying base independent claims.

More specifically, claims 2-4, 19-25, 31-34, 37-39, 54-56, 73 and 77-78 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson. Claims 2-4 depend from claim 1 and therefore incorporate all of the features of claim 1. As previously discussed in connection with the 102(a) and (e) rejection of claim 1, Eryilmaz does not disclose or suggest at least "a controller system including at least one controller and two or more data modules," or the synchronization of the collection of data with the at least one controller as required by claim 1. Guiberson also fails to disclose or suggest these elements of claim 1 and therefore does not cure the shortcomings of Eryilmaz with respect to claim 1. Since Eryilmaz and Guiberson do not disclose or suggest the elements of claim 1, they cannot disclose or suggest the elements of dependent claims 2-4. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) of claims 2-4 and that claims 2-4 be allowed. Furthermore, as noted above, independent claims 19, 36, 53, 73 and 76 also include claim elements similar to those discussed for claim 1 that are not disclosed or suggested by Erymilaz. As Guiberson also fails to disclose or suggest these claim elements, the combination of references fails to disclose all of the elements of independent claims 19, 36, 53, 73 and 76. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections of claims depending from these independent claims, namely claims 20-25, 31-34, 37-39, 54-56, and 77-78. Applicant respectfully requests that claims 20-25, 31-34, 37-39, 54-56, and 77-78 be allowed.

Claims 9, 43, 61 and 84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in view of Chen in further view of Mikurak. Claim 9 depends from claim 1 and therefore incorporates all of the features of claim 1. As previously discussed, Eryilmaz in view of Guiberson does not disclose or suggest at least "a controller system including at least one controller and two or more data modules," or the synchronization of the collection of data with the at least one controller as required by claim 1. Chen and Mikurak (which were cited by the Examiner as disclosing data history parameters and data formats respectively) also fail to disclose or suggest these elements of claim 1 and therefore does not

cure the shortcomings of Eryilmaz and Guiberson with respect to claim 1. Since Eryilmaz, Guiberson, Chen and Mikurak do not disclose or suggest the elements of claim 1, these references cannot disclose or suggest the elements of dependent claim 9. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) of claim 9 and that claim 9 be allowed. Furthermore, as noted above, independent claims 36, 53, 73 and 76 also include claim elements similar to those discussed for claim 1 that are not disclosed or suggested by Erymilaz and Guiberson. As Chen and Mikurak also fail to disclose or suggest these claim elements, the combination of references fails to disclose all of the elements of the independent claims. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections of claims 43, 61 and 84 and that claims 43, 61 and 84 be allowed.

Claims 10, 44, 62 and 85 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Herbrich. Claim 10 depends from claim 1 and therefore incorporates all of the elements of claim 1. As previously discussed, Eryilmaz does not disclose or suggest at least "a controller system including at least one controller and two or more data modules," or the synchronization of the collection of data with the at least one controller as required by claim 1. Herbrich (which was cited by the Examiner as teaching a buffering mode) also fails to disclose or suggest these elements of claim 1 and therefore does not cure the shortcomings of Eryilmaz with respect to claim 1. Since Eryilmaz and Herbrich does not disclose or suggest the elements of claim 1, these references cannot disclose or suggest the elements of dependent claim 10. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection of claim 10 and that claim 10 be allowed. Furthermore, as noted above, independent claims 36, 53 and 76 also include claim elements similar to those discussed for claim 1 that are not disclosed or suggested by Erymilaz. As Herbrich also fail to disclose or suggest these claim elements, the combination of references fails to disclose all of the elements of the independent claims. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections of claims 44, 62 and 85 and that claims 44, 62 and 85 be allowed.

Claims 11, 45, 63 and 86 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Chen. Claim 11 depends from claim 1 and therefore incorporates all of the elements of claim 1. As previously discussed, Eryilmaz does not disclose or suggest at least "a controller system including at least one controller and two or more data modules," or the

synchronization of the collection of data with the at least one controller as required by claim 1. Chen (which was cited by the Examiner as teaching the utilization of a scroll function) also fails to disclose or suggest these elements of claim 1 and therefore does not cure the shortcomings of Eryilmaz with respect to claim 1. Since Eryilmaz and Chen do not disclose or suggest the elements of claim 1, these references cannot disclose or suggest the elements of dependent claim 11. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection of claim 11 and that claim 11 be allowed. Furthermore, as noted above, independent claims 36, 53 and 76 also include claim elements similar to those discussed for claim 1 that are not disclosed or suggested by Erymilaz. As Chen also fails to disclose or suggest these claim elements, the combination of references fails to disclose all of the elements of the independent claims. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections of claims 45, 63 and 86 and that claims 45, 63 and 86 be allowed.

Claims 12, 46, 64 and 87 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Coburn. Claim 12 depends from claim 1 and therefore incorporates all of the elements of claim 1. As previously discussed, Eryilmaz does not disclose or suggest at least "a controller system including at least one controller and two or more data modules," or the synchronization of the collection of data with the at least one controller as required by claim 1. Coburn (which was cited by the Examiner as teaching a time tracking function) also fails to disclose or suggest these elements of claim 1 and therefore does not cure the shortcomings of Eryilmaz with respect to claim 1. Since Eryilmaz and Coburn do not disclose or suggest the elements of claim 1, these references cannot disclose or suggest the elements of dependent claim 12. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection of claim 12 and that claim 12 be allowed. Furthermore, as noted above, independent claims 36, 53 and 76 also include claim elements similar to those discussed for claim 1 that are not disclosed or suggested by Erymilaz. As Coburn also fails to disclose or suggest these claim elements, the combination of references fails to disclose all of the elements of the independent claims. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections of claims 46, 64 and 87 and that claims 46, 64 and 87 be allowed.

Claims 13, 47, 65 and 88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Mikurak. Claim 13 depends from claim 1 and therefore incorporates all of the elements of claim 1. As previously discussed, Eryilmaz does not disclose or suggest at least "a controller system including at least one controller and two or more data modules," or the synchronization of the collection of data with the at least one controller as required by claim 1. Mikurak (which was cited by the Examiner as teaching a broadcasting function) also fails to disclose or suggest these elements of claim 1 and therefore does not cure the shortcomings of Eryilmaz with respect to claim 1. Since Eryilmaz and Mikurak do not disclose or suggest the elements of claim 1, these references cannot disclose or suggest the elements of dependent claim 13. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection of claim 13 and that claim 13 be allowed. Furthermore, as noted above, independent claims 36, 53 and 76 also include claim elements similar to those discussed for claim 1 that are not disclosed or suggested by Erymilaz. As Mikurak also fails to disclose or suggest these claim elements, the combination of references fails to disclose all of the elements of the independent claims. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejections of claims 47, 65 and 88 and that claims 47, 65 and 88 be allowed.

Applicant respectfully submits that claims 26-30 are allowable for at least the same reasons as claim 19. Claims 26-30 all depend, directly or indirectly, on independent claim 19. Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Chen in still further view of Mikurak. Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Herbrich. Claim 28 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Chen. Claim 29 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Coburn. Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eryilmaz in view of Guiberson in further view of Mikurak. As discussed above with regard to claim 19, the combination of Eryilmaz and Guiberson does not disclose or suggest all of the claim elements recited in claim 19. Additionally as noted above, Chen, Mikurak, Herbrich and Coburn, individually or collectively, also fail to disclose or suggest the missing claim elements from claim 19 that are not found in Eryilmaz and Guiberson. Accordingly, as the cited combination of references fails

to disclose all of the elements of claim 19 upon which claims 26-30 depend, Applicant requests the allowance of claims 26-30.

# **CONCLUSION**

In view of the above amendment and remarks, Applicant believes the pending application is in condition for allowance.

Dated: November 26, 2007 Respectfully submitted,

By /jsc/
John S. Curran
Registration No.: 50,445
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant